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A ‘chemical cocktail’ of sewage, agricultural waste, and plastic is polluting the waters of many of the country’s rivers. Water companies appear to be dumping untreated or partially treated sewage in rivers on a regular basis... Farm slurry and fertiliser run off is choking rivers with damaging algal blooms... Not a single river in England has received a clean bill of health. “

House of Commons Environmental Audit Committee report

The farming methods used for the past century to supply essential nutrients are no longer working. In fact, they are making things even worse...

- Inorganic fertilisers provided directly to the soil!
- The energy required producing fertiliser is 2 per cent of the energy we use.
- Only 40 % of the fertilisers applied is absorbed by the plants it's aimed at.
- Remaining 60% leech's into the surrounding soil, runs off into rivers and other natural habitats leading to toxic environmental effects.

Agricultural runoff



Typically a nonpoint pollution source; hard to locate where it comes from.



Because of poor management of animal feeding operations, excessive ploughing, poor application of pesticides, irrigation water and fertilizer.



Contaminates drinking water, chemicals in fertilizers absorbed by aquatic plants, creating algae blooms effecting ability to find food & reproduce.

- Its impacts can be reduced by adapting mgmt. practices to local conditions, including nutrient management plans, using high-efficient irrigation equipment, and limiting pesticide use.

Legislation

- ✓ The number of violations designed to reduce water pollution caused by agriculture has hit record levels as the rules remain largely unenforced.
- ✓ 2021 was the highest number of recorded violations of the farming rules for water since the legislation was introduced in April 2018.
- ✓ A total of 391 breaches were identified during the last financial year, up from 106 breaches officially recorded in the previous year.
- ✓ Despite implementation more than four years ago, the Environment Agency has yet to issue any fines or prosecute under the legislation.

Legislation

- The increasing offences and Lack of enforcement, demonstrates a failure to protect the most fragile ecosystems
- Agricultural runoff is the biggest single polluter of rivers, responsible for 40% of damage to waterways (EA September 2020).
- No river in the country had achieved good chemical status and only 14% of a good ecological standard.
- In the past two years 2,053 EA inspections have identified a total of 497 violations (farming rules for water).
- It is estimated that around a 20% of the 106,000 farm businesses regulated by the EA are likely to be breaching the rules.

Environment Agency

- Since 2011, the budget of the EA (or equivalent statutory agencies) has been cut by 75%.
- As a direct consequence, environmental protection is collapsing and river testing: 100,000 samples 2012
41,519 samples 2021; (lowest level in 20 years).
- The EA were also instructed to re-direct funding to flood defence.
- Prosecutions of polluters during this period collapsed by 95%; averaging seven prosecutions a year between 2015 and 2021

EA Pollution Enforcement

- ✓ The EA knew raw sewage was being illegally dumped from wastewater treatment works a decade ago, a leaked report shows.
- ✓ The EA chief executive told MPs in May 2022 that the practice had only recently come to light.
- The data shows that 1,802 monitors provided information for less than 90% of the time. Also 1,717 storm overflows have no monitor installed.
- Last year for waterways, 25% of sewage discharges went unmonitored in total because the monitors were not working; or were left uninstalled.

Environment Audit Committee report January 2022

- ✓ Governments, water companies and regulators have grown complacent and resigned to dumping sewage in rivers.
- ✓ A 'chemical cocktail' of sewage, agricultural waste, plastic and persistent chemicals is polluting rivers.
- ✓ An overview of the health of rivers and the pollution affecting them is hampered by outdated, underfunded and inadequate monitoring.
- ✓ Many harmful pollutants are not routinely monitored, and the EA has reduced the number of monitoring sites.

Environment Audit Committee report January 2022

- ✓ The presence of persistent chemicals and spread of resistant pathogens in rivers are issues of grave concern.
- ✓ Not a single river in England has received a clean bill of health for chemical contamination, with untreated sewage regularly dumped.
- ✓ Rainwater washing into storm sewers can contain microplastics, industrial chemicals, mixing with human waste containing harmful bacteria.
- ✓ In some cases, the only 'treatment' discharges have received is to pass through a mesh grill.

Environment Audit Committee report January 2022

- Found the claim made by the chief executive of Severn Trent that its sewer overflow discharges were ‘pretty much already rainwater’ disingenuous.
- As water companies do not routinely test discharges from storm overflows, they are in no position to make this claim.
- To Claim otherwise shows a disregard for the public’s concern about water quality in rivers.
- The EA does not consider use of storm overflows to be a pollution incident: discharges from overflows are classed as permitted discharges.

Environment Audit Committee report January 2022

- It's clear there are no quick fixes to decades of under-investment in the sewerage network.
- Government, water companies and regulators have grown complacent and appeared resigned to the dumping of sewage in rivers.
- Independent analysis of data, has shown under performance of the sewerage network - which appears beyond the capacity of the EA to achieve, let alone water companies.
- Given misreporting and large spills were routine at Southern Water, we cannot discount the possibility that similar practices have been occurring undetected at other water companies in England.

Water Companies

- Annual bonuses to executives rose by 20% in 2021, despite failing to meet sewage pollution targets.
- On average executives received £100,000 in one-off payments on top of their salaries, when foul water was pumped for 2.7m hours.
- In total the 22 water bosses paid themselves £24.8m, including £14.7m in bonuses, benefits and incentives, in 2021-2022.
- Since privatisation (1989), £72bn in dividends have been paid & Consumers have seen price rises of 40%.
- Scottish Water (public control) rated the best UK water company for customer service. The boss receives around £270,000 a year, compared with an average of £1.2m for CEOs of privatised English companies

Water Companies

- Sewage spills by water firms have risen 29-fold over the past five years, official data reveals.
- Raw sewage dumped into rivers and lakes across the country has risen from 12,637 in 2016 to 372,533 last year, according to the EA.
- The duration of the spills have vastly increased over the same time period.
- | | |
|-------------------|--------------------|
| 2016: - 100,533 | hours of spillages |
| 2021: - 2,667,452 | hours of spillages |

Raw sewage discharged (English rivers) 375,000 times in 2021

- Untreated sewage should only be released into rivers and coastal waters via storm overflow pipes in extreme weather.
- Water companies are allowed to self-report breaches of raw sewage release in exceptional circumstances.
- Evidence has shown water companies routinely discharge untreated sewage rather than treating it.
- EA data; raw sewage released for hundreds of thousands of hours in 2021, a total 372,533 spills were recorded where monitors were in place.

Raw sewage discharged (English rivers) 375,000 times 2021

- Evidence from Prof P Hammond, indicated that water company's were responsible for 10 times more dumping than they were disclosing.
- The EA said “water companies were not reporting the total number of incidents. Self-reporting remained at 77%”.
- Over the years the public have seen water company executives and investors rewarded while the environment and the public pay the price. “They are behaving like this for a simple reason: because they can.”

RESTORING OUR RIVERS, GCC REPORT July 2022

- Severn Trent (37,602 spills in the county), in Nov. 2021 conceded that they had no plans to stop dumping raw sewage into local rivers.
- ST in terms of the timescale to eliminate sewage outflows, said they did not want to make a zero promise as it relied on huge investments that may not be the best overall thing for the environment or economy
- ST confirmed that the dividend payment last year to shareholders was £64 million and the five year average dividend payment was £187 million.

Location Overflow	2019 spills	2019 hours	2020 spills	2020 hours	2021 spills	2012 Hours	comment
Warwick (Longbridge)	X	X	51	560	71	737	
Wellsbourn	X	X	62	679	84	1655	
Tiddington	42	94	20	16	4	2	
Stratford-Shipston road	6	4	0	0	5	1	
Stratford-Banbury road	6	4	2	4	1	1	
Stratford-Bridgeway	7	36	11	24	8	13	
Stratford-Paddock Lane	23	72	X	X	42	175	
Milcote	74	1206	49	583	33	372	
Weston on Avon	X	X	X	X	56	490	
Lower Binton Evesham road	0	0	18	150	45	578	
Welford on Avon- Boat Lane	35	174	34	135	49	259	
Barton road	22	67	6	17	14	56	
Bldford on Avon-High St.	44	925	X	X	4	3	
Merryfields Farm	60	1099	26	385	0	0	
Bldford on Avon Treatment works	130	2013	162	2249	163	3204	

Evesham-Burford road	10	2	8	1	10	4	
Evesham-Lower Leys	6	12	4	13	22	56	
Evesham-Battleton Park	28	48	30	139	20	125	
Evesham-Waterside	7	15	7	11	2	1	
Evesham-Abbey road	30	159	22	138	32	154	
Evesham-Hampton syphon	30	121	17	160	28	131	
Evesham-Pershore road	39	376	31	129	30	71	
Evesham-Avon St.	66	131	61	107	62	101	
Evesham-Hampton Park	71	445	56	404	44	302	
Crophthorn	31	186	2	27	8	43	
Lower moor	117	1795	136	2299	103	1536	
Pershore-Wyre road	60	959	119	2447	32	462	
Pershore-Cherry Orchard	8	44	74	1465	0	0	
Pershore-Defford road	1	6	7	20	16	12	
Defford	63	254	47	270	38	146	
Eckington-Mill Lane	6	47	13	107	21	175	

Location	Water Temp.	Nitrate level	Phosphate level
Abergavenny River Usk 02/11	12.0 C	0	0
Lower Lode River Avon	13.2 C	5 - 10	0.84
Abergavenny River Usk 17/11	12.0 C	0	0
Lower Lode River Avon	12.1 C	10	0.8

- Normally, only small amounts of nitrates are found naturally, an increase in nitrate levels come from septic tanks, fertilizer runoff and improperly treated wastewater.
- A nitrate-nitrogen reading that is 1.1-3.0 mg/L is considered good.
- A nitrate-nitrogen reading that is greater than 5.0 mg/L is considered poor and unsafe for drinking water.
- High nitrite levels can cause serious illnesses in fish (toxic).

What can be done short term?

- Despite the farming rules for water having been implemented in 2018, and the rising number of breaches being documented, the Environment Agency has yet to issue any fines or prosecute anyone under the legislation.
- Regulations for drainage systems on new developments passed in 2010, but not yet enforced in England (Wales enforced the measure in 2018) (schedule 3 of the Flood and Water Management Act 2010).
- A ban on wet wipes which are not biodegradable proposed in a private member's bill [by the Labour MP Fleur Anderson](#) but ignored by the Conservative government.
- Make it unprofitable for Water Companies to pour sewage into our rivers.

Until Brexit the UK was signed up to the EU ‘water framework directive’, which required that waters achieved “good” chemical and ecological status by 2027 at the latest.

The UK later reduced the target to 75% of waterways reaching just good ecological status by 2027.

The target for the majority of waterways to achieve good status in both chemical and ecological tests has now been pushed back to 2063.

Previous plans from 2009 and 2015 to oversee the recovery of a large proportion of these waters by 2015 and 2021 – but the targets were missed and pushed back.

SPOT THE DIFFERENCE

SPAIN



**Fine for going to
toilet in sea**

UK



**Fine for toilet
to go in sea**



SEWAGE POLLUTION ON THE RIVER AVON

Tewkesbury Friends of the Earth